

The Geologic Time Scale

ACTIVITY 10

Objective:

To understand that Earth's geological time has been divided into periods and that different plants and animals lived during specific time periods.

Vocabulary:

paleontology, geologic time scale

Materials:

- Access to a computer for each student or pair of students
- *The Geologic Time Scale* song
- A copy of *Geologic Time Scale Scavenger Hunt* for each student

Check for Understanding:

Correct the worksheet. Discuss any problems the students had with any of the sites. Have the students identify strategies they used to help navigate the internet.

Extensions:

- Have the students conduct research on the internet about a particular geological time period and share interesting facts they discover.
- Have students work in small groups to create a bulletin board on the geologic time scale.

Introduction:

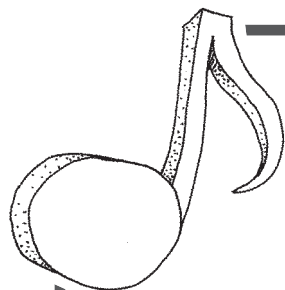
The Earth's geological history has been divided into different time periods. Each time period has certain characteristics depending upon the kinds of rocks, their relative position within the "stack," and what lived during that particular time. Try searching the internet for a geologic time scale.

Procedure:

1. Ask the students the following questions:
 - When did dinosaurs live? How do you know?
 - What do fossils tell us?
2. Discuss with students the division of Earth's history into various time periods. Play the *Geologic Time Scale* song and see how many of the names are familiar to the students. Can they now remember when dinosaurs lived? (Note: Even though the song only talks about Jurassic dinosaurs, we need to remember that dinosaurs actually lived during all three periods of the Mesozoic Era.)
3. Discuss the Internet and the number of science sites that are available. Tell the students that the sites they are going to contain a lot of information about the geologic time scale and paleontology.
4. Assign the scavenger hunt to be done either singly or in pairs, depending on the availability of computers.

*The ever-changing nature of the internet should be taken into account when conducting this activity. These are some excellent web sites, but web sites come and go. If some of these sites become unavailable, there are others you could substitute for them.

-University of California Museum of Paleontology



The Geologic Time Scale

GEOLOGIC TIME SCALE SCAVENGER HUNT

1. Which is the largest, an era, an eon, or an epoch?
2. What was the "Cambrian Explosion?"
3. In what era did flowering plants first appear?
www.nearctica.com
4. Which era is the "Age of Mammals?"
5. What language is the basis for most of the names of the time periods, such as Hadean or Cretaceous?
6. What was the final chapter of the *Age of Reptiles*?
Bonus Question: What is thought to be the most common animal during this time period?
7. According to the Paleo-maps, in which time period did Pangaea break apart
Bonus Question: What was the name of the new continent that would eventually become North America?
8. What event happened at the end of the Permian Period of the Paleozoic Era?
Bonus Question: What percentage of species died out?
9. Our society depends on coal for much of its electricity. When did coal forming swamps cover large parts of our continent?
10. What is a trilobite and when was the "Age of Trilobites?"

Suggested Sites:

www.ucmp.berkeley.edu/exhibits/geologictime.php
www.enchantellearning.com/subjects/geologictime.html
www.vulcan.wr.usgs.gov/glossary/geo_time_scale.html
ww.geology.com/time.htm
www.paleobiology.edu/geotime

